What is claimed is:

1. A (material) represented by the following Formula I.

wherein R is hydrogen or a hydroxy group.

2. An extract containing the material of claim 1, obtained from *Ecklonia cava* by use of an organic solvent.

3. A method for extracting and purifying from *Ecklonia* cava, the materials, represented by the following Formula I:

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wherein R is hydrogen or a hydroxy group, comprising the steps of:

extracting antioxidative ingredients from Ecklonia cava once or more times with an organic solvent;

fractionating the intioxidative ingredients one or more times in solvents; and

purifying the solvent fractions by chromatography.

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4. The method as set forth in claim 3, wherein said organic solvent is selected from the group consisting of methanol, ethanol, ethyl acetate, acetonitrile, acetone, aqueous solutions thereof, and mixtures thereof.

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The method as set forth in claim 3, wherein the extracting step is repeated using the same or different

solvents.

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6. The method as set forth in claim 3, wherein the fractionating step comprises:

a primary solvent-fractionating step of #ractionating the extract by using an aqueous 10 to 90 % methanol solution as a polar layer, and a /inear or cyclic hydrocarbon solvent, an aromatic solvent, mixture thereof as a nonpolar lawer;

solvent-fractionating step secondary fractionating an aqueous methanol layer obtained in the primary step by using an aqueous 10 to 60 % methanol solution as a/polar layer and at least one ether as a nonpolar layer; and

a tertiary solvent fractionating step of fractionating an aqueous methan layer obtained in the secondary step by using an aqueous 10 to 60 % methanol solution as a polar layer and chloroform, dichloromethane, or a mixture thereof as a nonpolar layer.

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7. The method as set forth in claim 3, wherein the fractionating step comprises:

a primary solvent-fractionating step of fractionating The extract by using an aqueous 10 to 90 % methanol solution as a polar layer, and hexane as a nonpolar

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layer;

- a secondary solvent-fractionating step of fractionating an aqueous methanol layer obtained in the primary step by using an aqueous 20 to 40 % methanol solution as a polar layer and isopropyl ether as a nonpolar layer; and
- an aqueous methanol layer obtained in the secondary step by using an aqueous 30 to 50 methanol solution as a polar layer and chloroform as a nonpolar layer.
- 8. The method as set forth in claim 3, further comprising the step of dissolving the extract in ethyl acetate and/or methanol and providing the dissolved portion to the fractionating step
- 9. The method as set forth in claim 3, wherein the chromatography is medium pressure liquid chromatography (MPLC) or high performance liquid chromatography (HPLC).

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10. Use of the material of claim 1 as antioxidants.

11/ Use of the extract of claim 2 as antioxidants.

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